

JUN 14 1993

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Redevelopment of Spectrum to
Encourage Innovation in the
Use of New Telecommunications
Technologies

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) ET Docket No. 92-9
)
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RM-7981

RM-8004

To: The Commission

COMMENTS OF THE
UTILITIES TELECOMMUNICATIONS COUNCIL
ON SUPPLEMENTAL ALCATEL FILING

Pursuant to Section 1.415 of the Federal Communications Commission's (FCC) Rules, the Utilities Telecommunications Council (UTC) hereby submits its comments with respect to the May 20, 1993, "Supplemental Comments" filed by Alcatel Network Systems (Alcatel) in the above captioned proceeding.^{1/} The Alcatel filing concerns a proposal to amend its previous channelization plan for the microwave bands above 3 GHz.

I. INTRODUCTION

As the national representative on communications matters for the nation's electric, gas, water, and steam utilities, and natural gas pipeline companies, UTC submitted comments and reply

Commission's Rules in order to accommodate microwave systems in

the hands above 2 GHz. WTC focused on the need to have

Telecommunications Industry Association (TIA) recommends a 1.25 MHz-based channelization plan as being superior to the proposed 1.6 MHz-based plan.

UTC examined both the FCC's channelization proposal and the alternative channelization plan recommended by TIA, and concluded that from the perspective of microwave system users both plans have positive attributes to recommend them, but neither plan appeared to have an inherent advantage over the other. Accordingly, rather than endorsing a particular channelization plan, UTC emphasized the attributes which it considered to be essential to a successful rechannelization of the upper microwave bands. UTC noted that rechannelization must maximize the number of channels available to accommodate: (1) existing 2 GHz systems that would be displaced by new, emerging technologies; and (2) new systems that would have been licensed in the 2 GHz band but for the FCC's new, secondary-only, licensing policy for the 2 GHz band. Further, UTC urged that rechannelization provide sufficient flexibility to accommodate the increasing bandwidth requirements of many private microwave users (e.g., 30 MHz).

In particular, UTC noted that the rechannelization and technical rules must accommodate the 13,000 existing 2 GHz "skinny route" stations, approximately half of which operate on

800 kHz channels.^{4/} Accordingly, if the channelization scheme ultimately adopted does not contain 800 kHz channels, UTC emphasized that the Commission's Rules must nevertheless allow systems with bandwidth requirements of less than the minimum channel bandwidth to obtain licensing (i.e., allow an 800 kHz 2 GHz system to relocate to a 1.25 MHz channel in the 6 GHz band).

III. ALCATEL COMPROMISE PLAN

In its Supplemental Comments Alcatel proposes a compromise channelization plan that attempts to reconcile the FNPRM channelization scheme and the TIA channelization scheme. Consistent with TIA's plan the Alcatel Supplemental Comments suggest a 1.25-MHz based plan. Specifically, the Alcatel compromise synthesizes the FNPRM plan and the TIA plan by proposing to:

- o Retain the 3.75, 2.5, and 1.25 MHz channel bandwidths proposed in the TIA plan;
- o Retain the 800 and 400 kHz channel bandwidths proposed in the FNPRM (Alcatel) plan;
- o Adopt the spectrum efficiency requirements from the TIA plan for narrow band systems (5 MHz or less) and adopt the spectrum efficiency requirements for wideband systems (10 MHz or greater) from the FNPRM plan;
- o Phase in spectrum efficiency requirements after a two-year transition period;
- o Relocate 3.75 MHz channels so that they will not block multiple 5 and 10 MHz channels;

^{4/} The "skinny route" is the 2.10-2.20 GHz portion of the 2 GHz band.

- o Give microwave users the option to concatenate multiple contiguous channels;
- o Remove 40 MHz wideband channels, retain 10 and 20 MHz channels, and remove narrow band channels in the 4 GHz band;
- o Adopt the upper 6 GHz and 11 GHz band channelizations from the FNPRM plan;
- o Add narrow band channels to the 11 GHz band, as proposed by TIA, and relocate these channels so that they will not overlap more than two wideband 30 or 40 MHz channels; and
- o Optimize access to the maximum number of 10 GHz channels as advocated by TIA.

IV **ALCATEL'S PROPOSED COMPROMISE WITH SLIGHT MODIFICATIONS, SHOULD BE ADOPTED**

A. UTC Generally Supports The Plan

Having examined the Alcatel compromise plan UTC believes that on the whole the plan provides a reasonable accommodation between the two conflicting channelization schemes. In particular the plan provides adequate bandwidth flexibility to meet the narrowband and wideband channelization requirements of private microwave users.

Moreover, the plan is not biased in favor of a particular microwave manufacturer and should therefore, promote competition and allow licensees to select among a wide range of microwave equipment manufacturers.

Finally, UTC's support for the Alcatel compromise plan should be distinguished from UTC's continued opposition to a

separate "compromise" plan that has been suggested under which the Commission would adopt the FNPRM channel plan for one or more of the bands, and adopt the TIA channeling plan for the remaining bands.^{5/} Unlike the Alcatel compromise the band-splitting "compromise" plan would segment the microwave equipment market and would not advance the interests of the private microwave community.

B. Unnecessary Loading Standards Should Not Be Imposed On Private Microwave Systems

Given the need to accommodate a significant number of private microwave systems in the bands above 3 GHz, UTC considers it inappropriate to adopt loading standards that would effectively inhibit the use of these bands for certain private systems. Loading requirements for wideband equipment would limit the ability of many private microwave users to convert their existing analog systems to digital systems. To require a demonstration of 50 percent initial channel loading and the use of auditors, as originally proposed by TIA, would impose an unnecessary burden on private microwave users and the FCC.

Often private microwave users plan and build microwave systems to meet anticipated rather than immediate loading requirements. For example, there are many utilities that are interested in migrating to asynchronous transfer mode (ATM) in

^{5/} UTC Ex Parte communication to Dr. Thomas Stanley, Chief Engineer, in ET Docket 92-9, May 19, 1993.

the future. However, in order to implement these systems microwave licensees would need SONET radio systems with rates of OC3 or higher and would therefore require 30 MHz bandwidths. High initial loading requirements could prohibit the development of such systems by utilities and other private microwave users.

Further, UTC agrees with Alcatel that rather than requiring the use of a minimum 3-DS3 radio, private microwave users should be allowed the option of utilizing a 2-DS3 radio with higher gain and a less complicated modulation scheme on 30 MHz bandwidth channels. Otherwise, private users would be limited in their ability to replace an analog link with a digital link in some of the more difficult path configurations (particularly, at 11 GHz). UTC therefore recommends that the loading standards for private microwave systems be based on loading after five years, as currently specified in Part 21.

C. 400 kHz Channels Are Not Necessary

UTC also recommends elimination of the Alcatel proposal to create 400 kHz channels in the upper microwave bands as the current minimum bandwidth at 2.1 GHz is 800 kHz. Moreover, it would not be cost-effective to employ 400 kHz channels in the microwave bands above 3 GHz.

V. CONCLUSION

UTC supports the basic proposals contained in the Alcatel plan as representing a reasonable compromise that meets the underlying needs of the private microwave community. The plan attempts to maximize the number of available channels to accommodate: (1) existing 2 GHz systems that would be displaced by new, emerging technologies; and (2) new systems that would have been licensed in the 2 GHz band but for the FCC's new, secondary-only, licensing policy for the 2 GHz band. Further, the plan provides sufficient flexibility to accommodate the increasing bandwidth requirements of many private microwave users (e.g., 30 MHz). Finally, the plan allows for competition among microwave equipment manufacturers.

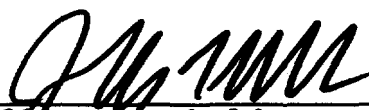
However, UTC opposes the application of burdensome and unnecessary loading standards on private microwave licensees. The imposition of such standards could preclude the ability of utilities and other private microwave users to convert to digital systems or implement advanced technologies such as SONET or ATM.

WHEREFORE, THE PREMISES CONSIDERED, the Utilities
Telecommunications Council respectfully requests the Commission
to take action consistent with the views expressed herein.

Respectfully submitted,

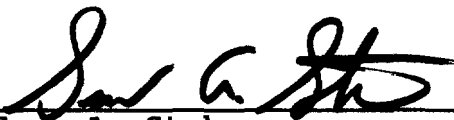
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CERTIFICATE OF SERVICE

I, Kim Winborne, a secretary with the Utilities
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